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EXAMINER	
ROCHE, TRENTON J	
ART UNIT	**PAPER NUMBER**
2193	

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/836,333	YOO, CHANG-WOONG	
	Examiner	Art Unit	
	Trenton J. Roche	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *01272005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to communications filed 25 April 2005. Claims 1-28 are currently pending.

2. Claims 1-28 have been examined.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 27 January 2005 has been fully considered by the Examiner.

Response to Examiner Interview Summary Record

4. The Examiner Interview Summary Record filed 27 January 2005 states that during a telephone discussion relating to paragraph 7 of Paper No. 7, the Applicant's representative indicated that paragraph 7 was improper and should be deleted from the record, as it "suggests that the Examiner did not fully consider and thoroughly study the references enclosed." In response, paragraph 6 clearly indicated that the IDS had been fully considered. Paragraph 7 was intended to clarify the situation raised with respect to Paper No. 4. As a foreign document was provided without a translation, the Examiner fully considered and studied the reference and information provided by the Applicant to the extent that it was determined necessary, in a manner consistent with MPEP § 609. As agreed upon in the telephone discussion, the Examiner will re-initial the clean copy of the PTO-1449 originally filed 18 April 2001.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 15-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 15 (and dependent claims 16-28) is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The claim recites a step of comparing the product key read from the second data storage unit with the product key of the first program, however, it is not indicated or claimed where this product key of the first program comes from. As the product key, which is entered upon initial installation, is written into the second data storage unit, then it would appear according to the claim language that the only key on the system is that key itself. The claim does not recite where second product key to be compared against comes from. Furthermore, the claim does not disclose what occurs when the product keys are found to not be identical, however, the "continuing to complete the installation..." limitation of the claim appears to occur whether the keys are found to be identical or not. In the case that they are not identical, then it is indefinite as to where the inputted product key comes from. As such, the claim is indefinite and the scope of the invention cannot be reasonably ascertained. Upon examination, the Examiner notes that an incorporation of dependent claims 19 and 27 would cure the deficiencies of the independent claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 3-5, 10 and 11 are rejected under 35 U.S.C. 103(a) as being anticipated by U.S. Patent 6,075,862 to Yoshida et al, hereafter referred to as Yoshida, in view of "Software-RAID Howto" by Vepstas.

Regarding claim 1:

Yoshida teaches:

- a computer system comprising a first data storage unit storing a first program and a second program ("a computer usable medium having computer readable program code...software to be installed into said computer, the computer readable program code means including: first computer readable program code means...second computer readable program code means..." in col. 3 lines 38-47)
- a second data storage unit storing a product key of the first program according to the second program, the product key accommodating an installation of the first program (Note Figure 1, item 13 and the corresponding sections of the disclosure. The decryption key is a key associated with the installed product, and as such is a product key.)
- a third program stored in the first data storage unit for reinstalling the first program, the third program reading the product key of the first program stored in the second data storage unit, when a product key from the third program and the product key stored in the second data storage unit are identical ("such that the decryption key stored in the memory device is utilizable in decrypting the encrypted software at a time of re-installing the encrypted

software" in col. 4 lines 13-15. Further, this is performed by the "decryption key retrieval program" as stated in col. 6 line 27. Finally, this reinstallation occurs "when the appropriate decryption key exists in the decryption key memory unit..." as stated in col. 11 lines 59-60, and is performed by "third computer readable program code means for causing said computer to decrypt the encrypted software...and install a decrypted software content..." in col. 3 lines 51-56. This third computer readable program code is contained in a computer usable medium, as discussed in col. 3 lines 37-62.)

substantially as claimed. Yoshida does not explicitly disclose the second data storage unit and the first data storage unit being separate. However, Vepstas discloses that it is well known by one of ordinary skill in the art that the utilization of multiple data storage units is beneficial in that a loss of one data storage unit does not result in a complete data loss, as alternate data can be stored on a secondary storage unit (Note page 7, section regarding RAID-4). As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize separate data storage units in the system disclosed by Yoshida, as this would allow the decryption information to be maintained, even in the event of a failure of the other data storage unit.

Regarding claim 3:

The rejection of claim 1 is incorporated, and further, Yoshida discloses a first data storage unit comprising a first unit storing the first program, and a second unit storing the third program as claimed (Note Figure 1, items 12 and 13 and the corresponding sections of the disclosure)

Regarding claim 4:

The rejection of claim 3 is incorporated, and further, Yoshida discloses the second program being stored in the first unit or the second unit as claimed (Note Figure 7 and the corresponding sections of the disclosure. The decryption key management system includes the decryption key storing program, as stated in col. 7 line 66 to col. 8 line 3)

Regarding claim 5:

The rejection of claim 3 is incorporated, and further, Yoshida discloses the second unit being a re-writable magnetic disk storage device or an optical storage device as claimed (Note Figure 1, item 12, which is a re-writable magnetic disk storage device.)

Regarding claim 10:

The rejection of claim 1 is incorporated, and further, Yoshida discloses the second program being installed in a hard disk drive storing the first program and application programs as claimed (Note Figure 7 and the corresponding sections of the disclosure. The decryption key management system includes the decryption key storing program, as stated in col. 7 line 66 to col. 8 line 3)

Regarding claim 11:

The rejection of claim 1 is incorporated, and further, Yoshida discloses erasing the second program when the product key is stored in the second data storage unit as claimed ("the software content of this software is deleted...while the corresponding software ID and decryption key are maintained..." in col. 9 lines 1-4)

10. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,075,862 to Yoshida et al, hereafter referred to as Yoshida, in view of "Software-RAID Howto" by Vepstas, further in view of U.S. Patent 6,163,841 to Venkatesan et al, hereafter referred to as Venkatesan.

Regarding claim 2:

The rejection of claim 1 is incorporated, and further, neither Yoshida nor Vepstas explicitly disclose the first program being an operating system. Venkatesan discloses in an analogous product key-based installation system the installation of an operating system as claimed ("a corresponding indicia which itself is uniquely associated with a given copy of a software product, for purposes of authenticating that particular copy during its installation...this product can be...an operating system..." in col. 5 line 65 to col. 6 line 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to associate the product key with the installation of an operating system in the system disclosed by Yoshida modified by Vepstas, for the purposes of authenticating that particular copy during its installation, as stated in col. 5 line 67 to col. 6 line 1 of Venkatesan.

Regarding claim 7:

The rejection of claim 1 is incorporated, and further, neither Yoshida nor Vepstas disclose obtaining a new product key when a product key from the third program and the product key stored in the second data storage unit are not identical ("When the appropriate decryption key does not exist in the decryption key memory unit, the communication program o the installer is executed to carry out the decryption key acquisition processing..." in col. 11 lines 21-24). Yoshida further discloses

"urging the acquisition of the decryption key to the user by means of a screen display of a message..." in col. 11 lines 35-36. Yoshida does not explicitly disclose a user directly inputting the product key into an information input window. Venkatesan discloses in an analogous product key-based installation system a user directly inputting the product key into an information input window as claimed ("will prompt the user to enter the indicia...the user, in response to this prompt, will then manually enter, typically through a keyboard associated with computer...the specific 25-digit alphanumeric indicia..." in col. 7 lines 58-63). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow a user to directly input the product key in the system disclosed by Yoshida as modified by Vepstas, as this would allow a user to authenticate and install the software product without the need to contact an external authentication server, in the case of a user not being connected with a communication network, as indicated in col. 11 lines 33-39 of Yoshida.

11. Claims 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,075,862 to Yoshida et al, hereafter referred to as Yoshida, in view of "Software-RAID Howto" by Vepstas, further in view of the Microsoft Press Computer Dictionary, Second Edition.

Regarding claim 6:

The rejection of claim 1 is incorporated, and further, neither Yoshida nor Vepstas disclose the product key being a bar code-readable signal. The Microsoft Press Computer Dictionary, Second Edition discloses that bar code-readable signals were well known in the art at the time, as disclosed on page 37 of the dictionary. It would have been obvious to one of ordinary skill in the art at the

time the invention was made to represent the product key as a bar code-readable signal, as this would allow rapid, error-free input of the information as disclosed on page 37 of the dictionary.

Regarding claim 8:

The rejection of claim 1 is incorporated, and further, neither Yoshida nor Vepstas disclose that the storage medium may include any suitable media for storing electronic instructions, including RAMs and ROMs and magneto-optical disks. Yoshida does not explicitly disclose the second data storage unit being an extended complementary metal-oxide semiconductor random-access memory. The Microsoft Press Computer Dictionary, Second Edition discloses that the use of CMOS RAM was well known in the art at the time of the invention as disclosed on page 77 of the dictionary for the purpose of storing information while using very low power consumption. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a CMOS RAM in the system disclosed by Yoshida as modified by Vepstas, for the purpose of storing information while using very low power consumption, as disclosed on page 77 of the dictionary.

Regarding claim 9:

The rejection of claim 8 is incorporated, and further, neither Yoshida nor Vepstas disclose the extended complementary metal-oxide semiconductor random-access memory having an auxiliary power source. The Microsoft Press Computer Dictionary, Second Edition discloses that the use of CMOS RAM with an auxiliary power source, providing the ability to preserve stored information when power is removed was well known in the art at the time of the invention as disclosed on page 77 of the dictionary (the CMOS RAM is powered by an external battery source). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a CMOS RAM

in the system disclosed by Yoshida as modified by Vepstas, for the purpose of storing and retaining information while using very low power consumption when power is removed from the system.

12. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,075,862 to Yoshida et al, hereafter referred to as Yoshida in view of U.S. Patent 6,163,841 to Venkatesan et al, hereafter referred to as Venkatesan, further in view of the Microsoft Press Computer Dictionary, Second Edition.

Regarding claim 12:

Yoshida teaches:

- storing a product key (Note Figure 1, item 13 and the corresponding sections of the disclosure)
- an operating system program for controlling the operations of a computer system ("operated under a prescribed operating system..." in col. 5 line 61)
- a computer system comprising a central processing unit, a main memory, a basic input-output system read only memory, an auxiliary memory storing therein information set up by the basic input-output system read only memory (Note at least Figure 1 and the corresponding sections of the disclosure. Personal Computer 11 inherently contains a BIOS.)
- storing the product key in a product key storage by activating a product key storage program ("program code means for causing said computer to store the decryption key...into the memory device..." in col. 3 lines 57-59)

substantially as claimed. Yoshida does not explicitly disclose the product key being for an operating system. Venkatesan discloses in an analogous product key-based installation system the installation of an operating system which requires entry of a product key as claimed ("a corresponding indicia which itself is uniquely associated with a given copy of a software product, for purposes of authenticating that particular copy during its installation...this product can be...an operating system..." in col. 5 line 65 to col. 6 line 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to associate the product key with the installation of an operating system in the system disclosed by Yoshida, for the purposes of authenticating that particular copy during its installation, as stated in col. 5 line 67 to col. 6 line 1 of Venkatesan.

Further, neither Yoshida nor Venkatesan explicitly disclose the product key comprising a bar code read by a bar code reader. The Microsoft Press Computer Dictionary, Second Edition discloses that bar code-readable signals capable of being read by an optical scanner were well known in the art at the time, as disclosed on page 37 of the dictionary. It would have been obvious to one of ordinary skill in the art at the time the invention was made to represent the product key as a bar code-readable signal, as this would allow rapid, error-free input of the information as disclosed on page 37 of the dictionary.

Regarding claim 13:

The rejection of claim 12 is incorporated, and further, note the rejection of claim 7.

Regarding claim 14:

The rejection of claim 12 is incorporated, and further, Yoshida discloses the product key storage program being installed in a hard disk drive storing an operating system program and application programs as claimed (Note Figure 7 and the corresponding sections of the disclosure. The decryption key management system includes the decryption key storing program, as stated in col. 7 line 66 to col. 8 line 3)

Response to Arguments

13. Applicant's arguments filed 25 April 2005 concerning claims 15-28 are persuasive. The rejection of claims 15-28 under 35 U.S.C. § 103(a) have been fully considered but they are not persuasive.

Per claim 1:

The Applicant states that Yoshida does not teach the product key from the decryption key retrieval program and the product key stored in the data storage unit being identical, and that the step of having a key on the retrieval program and checking it with the key on the storage unit is never made. In response, it is noted that Yoshida discloses searching and comparing the software ID to the stored decryption key. "the decryption key retrieval by the decryption key retrieval program...for sequentially comparing the software ID registered in the decryption key memory unit..." in col. 6 lines 34-39. Further, when the system does not find a matching key, then it retrieves a new key, as in col. 6 lines 50-53, "when the decryption key retrieval by the decryption key retrieval program fails, that is, when the corresponding decryption key does not exist in the decryption key memory unit..." As such, Yoshida does disclose checking the memory unit for an identical key, and retrieving the key as a result.

The Applicant further states that there is no motivation to combine Yoshida with Vepstas, and that Vepstas does not teach allowing the decryption information to be maintained, even if the event of a failure of the other data storage unit, and that there is no teaching that one program (the third program) would be left on the first storage device while the key code would be stored in a separate storage device. In response, it is noted that Yoshida disclosed the storing of the program and key on a first and second storage unit. The claim was then amended to indicate that the second data storage unit is separate from the first data storage unit. It is noted that the claim language as recited does not disclose any specifics pertaining to a selection of one data storage unit over another dependent upon whether the item at hand is a program or product key, only that there is a first data storage unit storing programs, and a second data storage unit storing a product key. As was shown before, Yoshida disclosed these limitations. The Applicant states on page 5, "Why store the key code remotely?" In response, the Examiner notes that nothing in the claim language indicates any reason that the Applicant would store the key code remotely, or how storing the key code remotely affords any benefit to the claimed invention; the claim merely states that the first storage unit and the second storage unit are separate. Consequently, all that is required is a motivation to why one skilled in the art would decide to separate storage units. Vepstas discloses a motivation to separate storage units for a computer system. On page 7 of Vepstas, it is disclosed that "RAID is a way of combining multiple disk drives...to improve...reliability...RAID can protect against disk failure..." As such, there is clear motivation why one of ordinary skill in the art would utilize well-known RAID disks in any computer system for storing data, including Yoshida. The rejection of claim 1 is proper and maintained.

Per claims 3 and 4:

The applicant states that Yoshida fails to disclose separate units for storing the first program and the third program. In response, it is noted that the claim language states that the first data storage unit comprises a first unit storing the first program, and a second unit storing the third program. As such, the programs are not stored in separate data storage units, but rather stored in separate "units" in a data storage unit. As such, according to the broadest reasonable interpretation of the claim language, the memory region containing the decryption key memory unit is a separate "unit" from that of the main hard disk device storage "units." Moreover, the "third computer readable program code means for causing said computer to decrypt the encrypted software...and install a decrypted software content..." in col. 3 lines 51-56 is contained in a computer usable medium, as discussed in col. 3 lines 37-62. For these reasons, the rejection of claims 3 and 4 are proper and maintained.

Per claim 5:

The applicant states that Yoshida fails to disclose a second unit being a re-writable magnetic disk storage device or an optical storage device as claimed. In response, it is noted that Figure 1, item 12 discloses a re-writable magnetic disk storage device. The rejection of claim 5 is proper and maintained.

Per claims 6, 8 and 9:

The Applicant states that the Examiner improperly used a dictionary as a reference. In response, as noted in the prior office action, the applicant did not provide an explanation as to why the Microsoft Press Computer Dictionary does not qualify as prior art, consequently, it is unclear to the Examiner

as to what constitutes an "actual" reference as opposed to any other sort of reference. Furthermore, nothing in the MPEP prohibits the use of a dictionary as prior art. Rather, MPEP 2128 states:

> A REFERENCE IS A "PRINTED PUBLICATION" IF IT IS ACCESSIBLE TO THE PUBLIC
>
> A reference is proven to be a "printed publication" "upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it." In re Wyer, 655 F.2d 221, 210 USPQ 790 (CCPA 1981) (quoting I.C.E. Corp. v. Armco Steel Corp., 250 F. Supp. 738, 743, 148 USPQ 537, 540 (SDNY 1966))

A dictionary is clearly material that is available and accessible to the public, and persons interested and ordinarily skilled in the subject matter or art of computer technology can certainly locate a Microsoft Press Computer Dictionary. Furthermore, the entries provided in the Microsoft Press Computer Dictionary, as stated on page 8 of the Introduction, "go beyond a simple definition to provide additional detail and to put the term **in context for a typical computer user.**" (emphasis added). In terms of the definitions relied upon in this rejection, for example, the definition of bar code, the line "Used for rapid, error-free input in such facilities as libraries, hospitals, and grocery stores..." can hardly be considered a definition of the word, but rather a context and situation in which the word is used. As such, the Microsoft Press Computer Dictionary does constitute an "actual" reference, one which provides reasons and motivations to utilize various technologies. Furthermore, the reasons cited by the Examiner are not "random" reasons as suggested by the Applicant on page 10 of the remarks, but as noted above, are contexts of use for a typical computer user, and provide motivation as to why the typical computer use would use the cited technology. In the instance of the CMOS RAM entry, it is stated "CMOS chips are known for their extremely low power consumption and high tolerance for noise from the power supply." This is clearly not a "random" reason invented by the Examiner. For these reasons, the rejections of claims 6, 8, 9, 12-14, 16, 18 and 28 are proper and maintained.

Per claim 7:

The applicant states that Venkatesan does not teach or suggest the effect of direct input, and that instead Venkatesan will only remotely enter the code rather than directly entering the code. In response, it is noted that nothing in the claim language precludes the ability for a user to be remote, and further, even remote entry of a product key is still considered direct entry of the key, as the user is directly entering the key into the system, be it remote or local. The rejection of claim 7 is proper and maintained.

Per claims 12-14:

The Applicant argues that the use of the Microsoft Press Computer Dictionary is an improper reference. In response, note the remarks concerning claims 6, 8 and 9. The rejection of claims 12-14 is proper and maintained.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent 6,567,860 to Maxwell et al. discloses automated installation systems wherein product serial numbers are stored in answer files on a storage device
- U.S. Patent 6,202,070 to Nguyen et al. discloses a system which will "prompt for a serial number if a valid one does not exist in CMOS." (col. 44)

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trenton J. Roche whose telephone number is (571) 272-3733. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Trenton J Roche
Examiner
Art Unit 2193

TJR

KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100